

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to these regulations, published at 1114 OG 29, May 15, 1990 and at 55 FR 18230, May 1, 1990.
- 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing."
- 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- 7. Other: _____

Applicant Must Provide:

- An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- An initial or substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (703) 308-4216

For CRF Submission Help, call (703) 308-4212

PatentIn Software Program Support (SIRA)

Technical Assistance.....703-287-0200

To Purchase PatentIn Software.....703-306-2600

PAGE: 1

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/490,208DATE: 02/15/2000
TIME: 15:06:25

Input Set: I490208.RAW

This Raw Listing contains the General Information Section and those Sequences containing ERRORS.

Does Not Comply
Corrected Diskette Needed

1 <110> C. Frank Bennett
 2 Nicholas M. Dean
 3 Lex M. Cowser
 4 <120> ANTISENSE MODULATION OF INDUCIBLE NITRIC OXIDE SYNTHASE EXPRESSION
 5 <130> RTS-0066
 6 <140> US/09/490,208
 7 <141> 2000-01-24
 8 <160> 182

ERRORED SEQUENCES FOLLOW

E--> 9 <210> 10
 10 <211> 4110 4/45 ntur (P6)
 11 <212> DNA
 12 <213> Mus musculus
 13 <220>
 14 <221> mRNA
 15 <222> (1) ... (4110)
 16 <400> 10
 17 ctgcttaaa atctctcgcc cacccttgc gaggggactg ggcagttcta gacagtcccg 60
 18 aagttctcaa ggcacaggc tcttcctgggt ttgactgtcc ttacccccc gaggcagtgc 120
 19 agccagctgc aagccccaca gtgaagaaca tctgagctca aatccagata agtgcataaa 180
 20 gtgacctgct ttgtaaagcc atagag atg gcc tgt cct tgg aaa ttt ctg ttc 233
 21 Met Ala Cys Pro Trp Lys Phe Leu Phe
 22 1 5
 23 aag acc aaa ttc cac cag tat gca atg aat ggg gaa aaa gac atc aac 281
 24 Lys Thr Lys Phe His Gln Tyr Ala Met Asn Gly Glu Lys Asp Ile Asn
 25 10 15 20 25
 26 aac aat gtg gag aaa gcc ccc tgt gcc acc tcc agt cca gtg aca cag 329
 27 Asn Asn Val Glu Lys Ala Pro Cys Ala Thr Ser Ser Pro Val Thr Gln
 28 30 35 40
 29 gat gac ctt cag tat cac aac ctc agc aag cag cag aat gag tcc ccg 377
 30 Asp Asp Leu Gln Tyr His Asn Leu Ser Lys Gln Gln Asn Glu Ser Pro
 31 45 50 55
 32 cag ccc ctc gtg gag acg gga aag aag tct cca gaa tct ctg gtc aag 425
 33 Gln Pro Leu Val Glu Thr Gly Lys Lys Ser Pro Glu Ser Leu Val Lys
 34 60 65 70
 35 ctg gat gca acc cca ttg tcc tcc cca cgg cat gtg agg atc aaa aac 473
 36 Leu Asp Ala Thr Pro Leu Ser Ser Pro Arg His Val Arg Ile Lys Asn

PAGE: 2

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/490,208DATE: 02/15/2000
TIME: 15:06:25

Input Set: I490208.RAW

40	90	95	100	105	
41	ggg att tta act tgc agg tcc aaa tct tgc ctg ggg tcc att atg act				569
42	Gly Ile Leu Thr Cys Arg Ser Lys Ser Cys Leu Gly Ser Ile Met Thr				
43	110	115	120		
44	ccc aaa agt ttg acc aga gga ccc agg gac aag cct acc cca gat				617
45	Pro Lys Ser Leu Thr Arg Gly Pro Arg Asp Lys Pro Thr Pro Pro Asp				
46	125	130	135		
47	gag ctt cta cct caa gct atc gaa ttt gtc aac caa tat tac ggc tcc				665
48	Glu Leu Leu Pro Gln Ala Ile Glu Phe Val Asn Gln Tyr Tyr Gly Ser				
49	140	145	150		
50	ttc aaa gag gca aaa ata gag gaa cat ctg gcc agg gtg gaa gcg gta				713
51	Phe Lys Glu Ala Lys Ile Glu Glu His Leu Ala Arg Val Glu Ala Val				
52	155	160	165		
53	aca aag gag ata gaa aca aca gga acc tac caa ctg acg gga gat gag				761
54	Thr Lys Glu Ile Glu Thr Thr Gly Thr Tyr Gln Leu Thr Gly Asp Glu				
55	170	175	180	185	
56	ctc atc ttc gcc acc aag cag gcc tgg cgc aat gcc cca cgc tgc att				809
57	Leu Ile Phe Ala Thr Lys Gln Ala Trp Arg Asn Ala Pro Arg Cys Ile				
58	190	195	200		
59	ggg agg atc cag tgg tcc aac ctg cag gtc ttc gat gcc cgc agc tgt				857
60	Gly Arg Ile Gln Trp Ser Asn Leu Gln Val Phe Asp Ala Arg Ser Cys				
61	205	210	215		
62	tcc act gcc cgg gaa atg ttt gaa cac atc tgc aga cac gtg cgt tac				905
63	Ser Thr Ala Arg Glu Met Phe Glu His Ile Cys Arg His Val Arg Tyr				
64	220	225	230		
65	tcc acc aac aat ggc aac atc agg tcg gcc atc acc gtg ttc ccc cag				953
66	Ser Thr Asn Asn Gly Asn Ile Arg Ser Ala Ile Thr Val Phe Pro Gln				
67	235	240	245		
68	cgg agt gat ggc aag cac gac ttc cgg gtg tgg aat gct cag ctc atc				1001
69	Arg Ser Asp Gly Lys His Asp Phe Arg Val Trp Asn Ala Gln Leu Ile				
70	250	255	260	265	
71	cgc tat gct ggc tac cag atg cca gat ggc agc atc aga ggg gac cct				1049
72	Arg Tyr Ala Gly Tyr Gln Met Pro Asp Gly Ser Ile Arg Gly Asp Pro				
73	270	275	280		
74	gcc aac gtg gaa ttc act cag ctg tgc atc gac ctg ggc tgg aag ccc				1097
75	Ala Asn Val Glu Phe Thr Gln Leu Cys Ile Asp Leu Gly Trp Lys Pro				
76	285	290	295		
77	aag tac ggc cgc ttc gat gtg gtc ccc ctg gtc ctg cag gcc aat ggc				1145
78	Lys Tyr Gly Arg Phe Asp Val Val Pro Leu Val Leu Gln Ala Asn Gly				
79	300	305	310		
80	cgt gac cct gag ctc ttc gaa atc cca cct gac ctt gtg ctt gag gtg				1193
81	Arg Asp Pro Glu Leu Phe Glu Ile Pro Pro Asp Leu Val Leu Glu Val				
82	315	320	325		
83	gcc atg gaa cat ccc aaa tac gag tgg ttt cgg gaa ctg gag cta aag				1241
84	Ala Met Glu His Pro Lys Tyr Glu Trp Phe Arg Glu Leu Glu Leu Lys				
85	330	335	340	345	
86	tgg tac gcc ctg cct gca gtg gcc aac atg ctg ctt gag gtg ggc ggc				1289
87	Tyr Tyr Glu Glu Leu Glu Leu Lys				

Input Set: I490208.RAW

90	Leu	Glu	Phe	Pro	Gly	Cys	Pro	Phe	Asn	Gly	Trp	Tyr	Met	Gly	Thr	Glu
91				365					370				375			
92	atc	gga	gtc	cg	gac	ttc	tgt	gac	gtc	cag	cgc	tac	aac	atc	ctg	gag
93	Ile	Gly	Val	Arg	Asp	Phe	Cys	Asp	Val	Gln	Arg	Tyr	Asn	Ile	Leu	Glu
94				380				385				390				
95	gaa	gtg	ggc	agg	aga	atg	ggc	ctg	gaa	acg	cac	aag	ctg	gcc	tcg	ctc
96	Glu	Val	Gly	Arg	Arg	Met	Gly	Leu	Glu	Thr	His	Lys	Leu	Ala	Ser	Leu
97				395				400			405					
98	tgg	aaa	gac	cag	gct	gtc	gtt	gag	atc	aac	att	gct	gtg	atc	cat	agt
99	Trp	Lys	Asp	Gln	Ala	Val	Val	Glu	Ile	Asn	Ile	Ala	Val	Ile	His	Ser
100				410			415			420			425			
101	ttt	cag	aag	cag	aat	gtg	acc	atc	atg	gac	cac	cac	tcg	gct	gca	gaa
102	Phe	Gln	Lys	Gln	Asn	Val	Thr	Ile	Met	Asp	His	His	Ser	Ala	Ala	Glu
103					430				435			440				
104	tcc	ttc	atg	aag	tac	atg	cag	aat	gaa	tac	cg	tcc	cgt	ggg	ggc	tgc
105	Ser	Phe	Met	Lys	Tyr	Met	Gln	Asn	Glu	Tyr	Arg	Ser	Arg	Gly	Gly	Cys
106					445				450			455				
107	ccg	gca	gac	tgg	att	tgg	ctg	gtc	cct	ccc	atg	tct	ggg	agc	atc	acc
108	Pro	Ala	Asp	Trp	Ile	Trp	Leu	Val	Pro	Pro	Met	Ser	Gly	Ser	Ile	Thr
109					460			465			470					
110	ccc	gtg	ttt	cac	cag	gag	atg	ctg	aac	tac	gtc	ctg	tcc	cct	ttc	tac
111	Pro	Val	Phe	His	Gln	Glu	Met	Leu	Asn	Tyr	Val	Leu	Ser	Pro	Phe	Tyr
112					475			480			485					
113	tac	tat	cag	gta	gag	gcc	tgg	aaa	acc	cat	gtc	tgg	cag	gac	gag	aag
114	Tyr	Tyr	Gln	Val	Glu	Ala	Trp	Lys	Thr	His	Val	Trp	Gln	Asp	Glu	Lys
115					490			495			500			505		
116	cg	aga	ccc	aag	aga	aga	gag	att	cca	ttg	aaa	gtc	ttg	gtc	aaa	gct
117	Arg	Arg	Pro	Lys	Arg	Arg	Glu	Ile	Pro	Leu	Lys	Val	Leu	Val	Lys	Ala
118						510				515			520			
119	gt	gt	ct	ttt	gc	tt	tgt	atg	ctg	atg	cgc	aag	aca	atg	gcg	ctg
120	Val	Leu	Phe	Ala	Cys	Met	Leu	Met	Arg	Lys	Thr	Met	Ala	Ser	Arg	Val
121						525			530			535				
122	aga	gtc	acc	atc	ctc	ttt	gcg	aca	gag	aca	gga	aaa	tca	gag	gcg	ctg
123	Arg	Val	Thr	Ile	Leu	Phe	Ala	Thr	Glu	Thr	Gly	Lys	Ser	Glu	Ala	Leu
124						540			545			550				
125	gc	tgg	gac	ctg	ggg	gc	tta	ttc	agc	tgt	gc	t	tc	aa	cc	aa
126	Ala	Trp	Asp	Leu	Gly	Ala	Leu	Phe	Ser	Cys	Ala	Phe	Asn	Pro	Lys	Val
127						555			560			565				
128	gt	tc	atg	gat	aag	tac	agg	ctg	agc	tc	ctg	gag	gag	gaa	cg	ctg
129	Val	Cys	Met	Asp	Lys	Tyr	Arg	Leu	Ser	Cys	Leu	Glu	Glu	Arg	Leu	
130						570			575			580			585	
131	ctg	ttg	gt	gt	acc	agt	ac	ttt	ggc	aat	gga	gac	tgc	cct	ggc	aat
132	Leu	Leu	Val	Val	Thr	Ser	Thr	Phe	Gly	Asn	Gly	Asp	Cys	Pro	Gly	Asn
133							590			595			600			
134	gga	gag	aaa	ctg	aag	aaa	tcg	ctc	ttc	atg	ctg	aaa	gag	ctc	aa	ac
135	Gly	Glu	Lys	Leu	Lys	Lys	Ser	Leu	Phe	Met	Leu	Lys	Glu	Leu	Asn	Asn
136							605			610			615			

PAGE: 4

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/490,208DATE: 02/15/2000
TIME: 15:06:25

Input Set: I490208.RAW

140	ttc tgc gcc ttt gct cat gac att gat cag aag ctg tcc cac ctg ggg	2153
141	Phe Cys Ala Phe Ala His Asp Ile Asp Gln Lys Leu Ser His Leu Gly	
142	635 640 645	
143	gcc tct cag ctc acc ccg atg gga gaa ggg gat gag ctc agt ggg cag	2201
144	Ala Ser Gln Leu Thr Pro Met Gly Glu Gly Asp Glu Leu Ser Gly Gln	
145	650 655 660 665	
146	gag gac gcc ttc cgc agc tgg gcc gtg caa acc ttc aag gca gcc tgt	2249
147	Glu Asp Ala Phe Arg Ser Trp Ala Val Gln Thr Phe Lys Ala Ala Cys	
148	670 675 680	
149	gag acg ttt gat gtc cga ggc aaa cag cac att cag atc ccc aag ctc	2297
150	Glu Thr Phe Asp Val Arg Gly Lys Gln His Ile Gln Ile Pro Lys Leu	
151	685 690 695	
152	tac acc tcc aat gtg acc tgg gac ccg cac tac agg ctc gtg cag	2345
153	Tyr Thr Ser Asn Val Thr Trp Asp Pro His His Tyr Arg Leu Val Gln	
154	700 705 710	
155	gac tca cag cct ttg gac ctc agc aaa gcc ctc agc agc atg cat gcc	2393
156	Asp Ser Gln Pro Leu Asp Leu Ser Lys Ala Leu Ser Ser Met His Ala	
157	715 720 725	
158	aag aac gtg ttc acc atg agg ctc aaa tct cgg cag aat cta caa agt	2441
159	Lys Asn Val Phe Thr Met Arg Leu Lys Ser Arg Gln Asn Leu Gln Ser	
160	730 735 740 745	
161	ccg aca tcc agc cgt gcc acc atc ctg gtg gaa ctc tcc tgt gag gat	2489
162	Pro Thr Ser Ser Arg Ala Thr Ile Leu Val Glu Leu Ser Cys Glu Asp	
163	750 755 760	
164	ggc caa ggc ctg aac tac ctg ccg ggg gag cac ctt ggg gtt tgc cca	2537
165	Gly Gln Gly Leu Asn Tyr Leu Pro Gly Glu His Leu Gly Val Cys Pro	
166	765 770 775	
167	ggc aac cag ccg gcc ctg gtc caa ggc atc ctg gag cga gtg gtg gat	2585
168	Gly Asn Gln Pro Ala Leu Val Gln Gly Ile Leu Glu Arg Val Val Asp	
169	780 785 790	
170	ggc ccc aca ccc cac cag aca gtg cgc ctg gag gac ctg gat gag agt	2633
171	Gly Pro Thr Pro His Gln Thr Val Arg Leu Glu Asp Leu Asp Glu Ser	
172	795 800 805	
173	ggc agc tac tgg gtc agt gac aag agg ctg ccc ccc tgc tca ctc agc	2681
174	Gly Ser Tyr Trp Val Ser Asp Lys Arg Leu Pro Pro Cys Ser Leu Ser	
175	810 815 820 825	
176	cag gcc ctc acc tac tcc ccg gac atc acc aca ccc cca acc cag ctg	2729
177	Gln Ala Leu Thr Tyr Ser Pro Asp Ile Thr Thr Pro Pro Thr Gln Leu	
178	830 835 840	
179	ctg ctc caa aag ctg gcc cag gtg gcc aca gaa gag cct gag aga cag	2777
180	Leu Leu Gln Lys Leu Ala Gln Val Ala Thr Glu Glu Pro Glu Arg Gln	
181	845 850 855	
182	agg ctg gag gcc ctg tgc cag ccc tca gag tac agc aag tgg aag ttc	2825
183	Arg Leu Glu Ala Leu Cys Gln Pro Ser Glu Tyr Ser Lys Trp Lys Phe	
184	860 865 870	
185	acc aac agc ccc aca ttc ctg gag gtg cta gag gag ttc ccg tcc ctg	2873
186	Thr Asn Ser Pro Thr Phe Leu Glu Val Leu Glu Phe Pro Ser Leu	

PAGE: 5

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/490,208DATE: 02/15/2000
TIME: 15:06:25

Input Set: I490208.RAW

190	890	895	900	905	
191	agg ttc tac tcc atc agc tcc tcc cgg gat cac acg ccc acg gag atc				2969
192	Arg Phe Tyr Ser Ile Ser Ser Arg Asp His Thr Pro Thr Glu Ile				
193	910	915	920		
194	cac ctg act gtg gcc gtg gtc acc tac cac acc gga gat ggc cag ggt				3017
195	His Leu Thr Val Ala Val Val Thr Tyr His Thr Gly Asp Gly Gln Gly				
196	925	930	935		
197	ccc ctg cac cac ggt gtc tgc agc aca tgg ctc aac agc ctg aag ccc				3065
198	Pro Leu His His Gly Val Cys Ser Thr Trp Leu Asn Ser Leu Lys Pro				
199	940	945	950		
200	caa gac cca gtg ccc tgc ttt gtg cgg aat gcc agc gcc ttc cac ctc				3113
201	Gln Asp Pro Val Pro Cys Phe Val Arg Asn Ala Ser Ala Phe His Leu				
202	955	960	965		
203	ccc gag gat ccc tcc cat cct tgc atc ctc atc ggg cct ggc aca ggc				3161
204	Pro Glu Asp Pro Ser His Pro Cys Ile Leu Ile Gly Pro Gly Thr Gly				
205	970	975	980	985	
206	atc gtg ccc ttc cgc agt ttc tgg cag caa cgg ctc cat gac tcc cag				3209
207	Ile Val Pro Phe Arg Ser Phe Trp Gln Gln Arg Leu His Asp Ser Gln				
208	990	995	1000		
209	cac aag gga gtg cgg gga ggc cgc atg acc ttg gtg ttt ggg tgc cgc				3257
210	His Lys Gly Val Arg Gly Arg Met Thr Leu Val Phe Gly Cys Arg				
211	1005	1010	1015		
212	cgc cca gat gag gac cac atc tac cag gag gag atg ctg gag atg gcc				3305
213	Arg Pro Asp Glu Asp His Ile Tyr Gln Glu Glu Met Leu Glu Met Ala				
214	1020	1025	1030		
215	cag aag ggg gtg ctg cat gcg gtg cac aca gcc tat tcc cgc ctg cct				3353
216	Gln Lys Gly Val Leu His Ala Val His Thr Ala Tyr Ser Arg Leu Pro				
217	1035	1040	1045		
218	ggc aag ccc aag gtc tat gtt cag gac atc ctg cgg cag cag ctg gcc				3401
219	Gly Lys Pro Lys Val Tyr Val Gln Asp Ile Leu Arg Gln Gln Leu Ala				
220	1050	1055	1060	1065	
221	agc gag gtg ctc cgt gtg ctc cac aag gag cca ggc cac ctc tat gtt				3449
222	Ser Glu Val Leu Arg Val Leu His Lys Glu Pro Gly His Leu Tyr Val				
223	1070	1075	1080		
224	tgc ggg gat gtg cgc atg gcc cgg gac gtg gcc cac acc ctg aag cag				3497
225	Cys Gly Asp Val Arg Met Ala Arg Asp Val Ala His Thr Leu Lys Gln				
226	1085	1090	1095		
227	ctg gtg gct gcc aag ctg aaa ttg aat gag gag cag gtc gag gac tat				3545
228	Leu Val Ala Ala Lys Leu Lys Leu Asn Glu Glu Gln Val Glu Asp Tyr				
229	1100	1105	1110		
230	ttc ttt cag ctc aag agc cag aag cgc tat cac gaa gat atc ttc ggt				3593
231	Phe Phe Gln Leu Lys Ser Gln Lys Arg Tyr His Glu Asp Ile Phe Gly				
232	1115	1120	1125		
233	gct gta ttt cct tac gag gcg aag aag gac agg gtg gcg gtg cag ccc				3641
234	Ala Val Phe Pro Tyr Glu Ala Lys Lys Asp Arg Val Ala Val Gln Pro				
235	1130	1135	1140	1145	
236	agc agc ctg gag atg tca gcg ctc tga gggctacag gaggggttaa				3688

PAGE: 6

RAW SEQUENCE LISTING
PATENT APPLICATION US/09/490,208DATE: 02/15/2000
TIME: 15:06:25Input Set: **I490208.RAW**

240 tggggagatg gaggaaagtg atatccccca gcctcaagtc ttatttcctc aacgttgctc 3808
241 cccatcaagc cctttacttg acctcctaac aagtagcacc ctggattgtat cggagcctcc 3868
242 tctctcaaac tggggcctcc ctggccctt ggagacaaaaa tcttaaatgc caggcctggc 3928
243 gagtggtga aagatggAAC ttgctgctga gtgcaccact tcaagtgacc accaggaggt 3988
244 gctatcgac cactgtgtat ttaactgcct tgcgtacagt tatttatgcc tctgtattta 4048
245 aaaaactaac acccagtctg ttccccatgg ccacttgggt ctccctgta tgattccttg 4108
246 atggagatAT ttacatgaat tgcatTTAC tttaatc

Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220> to
<223> fields of each sequence which presents at least one n or Xaa.

PAGE: 7

VERIFICATION SUMMARY
PATENT APPLICATION US/09/490,208

DATE: 02/15/2000
TIME: 15:06:25

Input Set: I490208.RAW

Line	?	Error/Warning	Original Text
10	E	Input 4110, Calc# Bases 4145 differ	<211> 4110